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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,405	03/07/2002	Young-Kyun Ha	1462-P02747USO	1716

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DANN, DORFMAN, HERRELL & SKILLMAN
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EXAMINER

GILES, NICHOLAS G

ART UNIT PAPER NUMBER

2612

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/009,405	Applicant(s) HA, YOUNG-KYUN	
	Examiner Nicholas G. Giles	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: There is no section for the summary of the invention. The summary appears to be disclosed in the "Background Art".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claim 3 recites the limitation "segment displays". There is insufficient antecedent basis for this limitation in the claim. For examining purposes this claim will be interpreted to be dependant on claim 2 to eliminate the lack of antecedent basis.
4. Claim 4 recites the limitation "if the initialing step". There is insufficient antecedent basis for this limitation in the claim.

Claim Objections

5. Claim 4 is objected to because of the following informalities: The claim language uses the phase, "at the above step". As written it is not possible to ascertain which step the language means. Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morota et al. (U.S. Patent No. 6,919,921) in view of Higurashi et al. (U.S. Patent No. 6,995,790).

Regarding claim 1, Morota et al. discloses:

An image system comprising: a camera assembly having a number of analog cameras, each arranged in a divided target area (5:57-6:19 and Figs. 5 and 6); a video signal selector (Receiving terminal 18 Fig 4) for selecting a particular camera for connecting a signal path of the camera (6:32-40); a video signal converter (Video capture device 36 Fig. 2) for converting a video signal received from the camera connected to the video signal selector into a digital video signal (4:23-34); and a controller (CPU 22 Fig. 2) for controlling operation of the camera assembly, the video signal selector, and the video signal converter (4:11-22).

Morota et al. is silent with regards to creating a composite image and saving and displaying the image. Higurashi et al. discloses:

Converting digital video signals into video data and composing it into one image (10:6-50 shows merging of multiple images) to be saved and displayed (7:39-51 shows saving and displaying the merged image and 9:20-33 shows the use of multiple cameras).

An advantage to creating a composite image is that one camera may not be able to see around a corner whereas another camera with a similar view but in a different location can, therefore the composing two or more images can allow full view of a scene. The advantage to saving an image is that the image may be referenced later for important information in the image only obtainable at the time the image was taken. An advantage to displaying an image is that important information can be obtained at the time the image was composed. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Morota's camera system include composing images and saving and displaying the composite image.

Regarding claim 2, see the rejection of claim 1 and note that Morota et al. further discloses:

The camera assembly is a matrix of $m \times n$ cameras to divide one rectangular display into a number of segment displays (5:57-6:19 and Fig 5).

Regarding claim 3, see the rejection of claim 2 and note that Higurashi et al. further discloses:

Calibration data input for inputting a reference point of each segment display to reduce an error produced from the discordance of the segment displays (10:6-50).

An advantage to calibrating the displays is that an image whose distortion is seemingly unclear such as a landscape image or a figure image can be easily corrected (10:42-44). For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Morota's camera system include calibrating the displays.

Regarding claim 4, Morota et al. discloses:

A video system composing system comprising a camera assembly consisting of a number of analog cameras (5:57-6:19 and Figs. 5 and 6), a video signal selector (Receiving terminal 18 Fig. 4) for connecting a signal path of each camera (6:32-40), a video signal converter (Video capture device 36 Fig. 2) for converting a video signal received from the camera into a digital signal (4:23-34), a controller (CPU 22 Fig. 2) for composing each digital video signal of the camera in one image to convert a video data (4:11-22), and operating the cameras of the camera assembly by receiving a control signal from the controller (3:25-33).

Morota et al. is silent with regards to the calibration. Higurashi et al. discloses:

Inputting a reference point of each segment display through the calibration data input to calibrate a discordance of the segment displays with reference to a display on the controller (10:6-50).

An advantage to calibrating the displays is that an image whose distortion is seemingly unclear such as a landscape image or a figure image can be easily corrected (10:42-44). For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Morota's camera system include calibrating the displays.

Higurashi et al. further discloses storing the correction parameters to be used in future calibrations (13:30-40, specifically A1 and A2 are stored which are used in the calibration in 10:6-50).

An advantage to storing correction parameters is that the parameters can be used as the default values in the future (13:37-40). For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Morota's camera system include storing the correction parameters.

Morota et al. further discloses replacing camera views on the display with other cameras (9:22-39 and note that this requires the system perform the conversion of the analog signal into a digital signal).

As shown above the calibration parameters are stored and can be used to calibrate the selected signal. Higurashi et al. further discloses:

Saving and displaying the composed video data (7:39-51 shows
saving and displaying the merged image)

An advantage to saving an image is that the image may be referenced later for important information in the image only obtainable at the time the image was taken. An advantage to displaying an image is that important information can be obtained at the

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time the image was composed. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Morota's camera system include saving and displaying the calibrated image.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6,552,744 Chen discloses stitching images together

5,532,765 Inoue et al. discloses image correction on a monitor

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas G. Giles whose telephone number is (571) 272-2824. The examiner can normally be reached on Monday through Friday from 8am to 4:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc - Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NGG


NGOC YEN VU
PRIMARY EXAMINER